

EXPRESS MAIL CERTIFICATE OF MAILING

Express Mail Certificate No. EV269145005US

I hereby certify that the *attached* correspondence comprising:

1. DECLARATION UNDER 37 CFR §1.131 Declaration by Lawrence W. Hrubesh, John F. Poco, and Paul R. Coronado to Overcome Cited Reference (3 pages) w/attachment (6 pages), 2. Return Postcard is being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" addressed to:

Mail Stop Non-Fee Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

on November 4, 2003

Kathy E. Raymond
Kathy E. Raymond

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant :	Lawrence W. Hrubesh, et al.	Docket No. :	IL-10624
Serial No. :	10/002,513	Art Unit :	1771
Filed :	10/25/2001	Examiner :	Erma C. Cameron
For :	FIBERS AND FABRICS WITH INSULATING, WATER-PROOFING, AND FLAME-RESISTANT PROPERTIES		

DECLARATION UNDER 37 CFR §1.131

Declaration by Lawrence W. Hrubesh, John F. Poco, and
Paul R. Coronado to Overcome Cited Reference

Commissioner of Patents and Trademarks
Alexandria, VA 22313-1450

Dear Sir:

We; hereby declare that:

(1). We,

Lawrence W. Hrubesh, 19 Grey Eagle Court, Pleasanton, CA 94566;

John F. Poco, 1841 Creek Road, Livermore, CA 94550; and

Paul R. Coronado, 1354 Balboa Way, Livermore, CA 94550;

are citizens of the United States and residents of the Cities and the State identified;

(2). We are the inventors named in the subject application;

(3). In the Office Action mailed August 22, 2003, claims 10-18 in the subject application were rejected over the Soane et al Reference, International Patent Application No. WO 01/06054 by Avant-Garb, LLC. Claims 1-9 in the subject application are non-elected claims that were the subject of a restriction requirement. The Soane et al Reference, International Patent Application No. WO 01/06054, was published January 25, 2001, from an application filed July 19, 2000. The filing date of the application from which the Soane et al Reference matured is July 19, 2000;

(4). We made the invention described and claimed in the subject patent application (The Invention) in this country prior to July 19, 2000, having made written descriptions, having made tests, and having disclosed the invention to others; all of the foregoing having been done in this country prior to July 19, 2000;

(5). We continuously worked on testing, developing, and patenting The Invention during the period from the time when We made the first written description of The Invention and disclosed The Invention to others until October 25, 2001 when the subject application was filed (hereinafter "The Time Period");

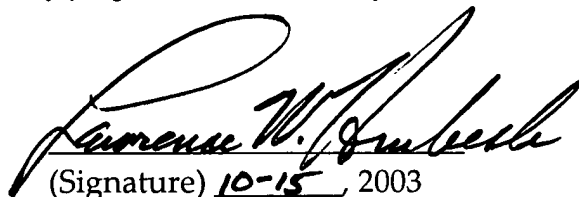
(6). We conceived and reduced The Invention to practice in this country prior to July 19, 2000;

(7). Attached as ATTACHMENT A is photostatic copy of a "RECORD OF INVENTION" which in the Conception of the Invention Section XI, contains an entry for the "Conception Date" and an entry for "First Written Description," in the Reduction to Practice of the Invention Section XII, contains an entry for the "Date of Operation and Testing," and in Section XIV contains blanks wherein

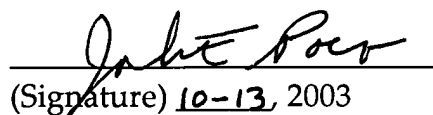
signatures and dates of signatures appear; the dates on the photostatic copy of ATTACHMENT A have been blacked out, however, dates showing that We made The Invention prior to July 19, 2000 are dates prior to July 19, 2000; that We conceived The Invention in this country are dates prior to July 19, 2000; that We reduced The Invention to practice in this country are dates prior to July 19, 2000, and dates showing that The Invention was continuously worked on during The Time Period are dates during The Time Period;

(8). We do not know and do not believe that the invention has been in public use or on sale in this country, or patented or described in a printed publication in this or any foreign country for more than one year prior to our application, and we have never abandoned our invention;

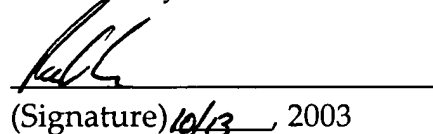
(9). We further declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


(Signature) 10-15, 2003

Declarant: Lawrence W. Hrubesh


(Signature) 10-13, 2003

Declarant: John F. Poco


(Signature) 10/13, 2003

Declarant: Paul R. Coronado

RECEIVED

LLNL PATENT GROUP

ATTACHMENT A
RECORD OF INVENTION

LLNL File No.
IL-10624

This invention was made in the course of or under prime Contract No. W-7405-ENG-48 between the U.S. Department of Energy and the University of California. This Record of Invention is prepared for the Office of the Assistant General Counsel for Patents, U.S. Department of Energy.

I. Title of the Invention

A method for insulating, water-proofing, and flame-proofing fibers and fabrics.

II. Inventor Information

LLNL Inventor(s) (F M L)	Title/Position	Directorate	Payroll Acct	Phone #	Mail Stop
Lawrence W. Hrubesh	Physicist	CMS	9808	3-1691	L-092
John F. Poco	Chemist	CMS	9808	3-9976	L-092
Paul R. Coronado	Chemist	CMS	9808	2-0155	L-092

III. Abstract

Any fibers and woven fabrics can be made water repellent, fire-retardent and thermally insulating by filling the void spaces in the fibers or fabrics with a hydrophobic, nanoporous powdered material. When the powder is sufficiently finely divided, it clings tenaciously to the fabric's fibers and to itself, resisting the tendency to be removed from the fabric. Thus, this treatment offers substantial long term improvement of the water repellent and thermal insulation properties over the untreated fabric, while not adding much additional weight to it.

IV. Uses of the Invention

List past uses, current uses and potential uses for your invention
 LLNL or Government uses or possibilities for use:

Military clothing, blankets, tents, raingear, fire/flame protection

Commercial or other uses or possibilities for use:

clothing, blankets, tents, raingear, fire/flame protection

RECORD OF INVENTION

Page 2

LLNL File No.

V. Documents Describing the Invention

Documents, publications, and presentations describing the invention that you have published or prepared for publication, or presented on the subject. Also include presentations and publications planned within one year from now. Please attach a copy of preprints, articles, or viewgraphs.

Title/Subject	Date	Publication #

VI. Documents Describing Prior Art (Please include copies of these documents.)

Related Documents (including patents, other publications) Please include patent numbers, authors, title, publication date, etc.

--

VII. Background

Background of the Invention, including technical problems addressed by it:

Fabrics are made water repellant by using fibers that are made of materials that will not be easily wet by water, or the fibers are coated with a water repellant material. The thermal insulating property of fabrics derives from the smallness of the fibers and the high ratio of void volume to solids within and between the fibers. To improve the water repellant property of a fabric, either better hydrophobic fibers or coatings are required, or the exposed surfaces of the un-treated fibers must be reduced. To improve the thermal insulating properties of a fabric, either smaller fibers are needed, or the void spaces within and between the fibers need to be made smaller. The best insulation would be achieved if the average fiber size and the average void size could be reduced below 0.1 micrometer.

**VIII. Invention Description**

Description of the invention (you may also attach a paper). Please include a sketch of the invention, if possible.

It is possible to fill the available void spaces in fibers and fabrics with a nanoporous material (powdered) whose particles and pores are so small that the thermal resistance of the powder is higher than that of the air that the powder is displacing. The powdered nanoporous material can be a hydrophobic material that is not easily wet with water. Thus the composite of fabric and powder has improved insulation and water-proofing properties.

The nanoporous powder can be any porous material that exhibits a microstructure consisting of sub-micrometer pores and particles; preferably, sol-gel derived, aerogel-like materials. The powders should have a composition such that the bulk material is not easily wet by pure water; preferably, the bulk material would make a contact angle greater than 90° with a water droplet on its surface.

The powder can be applied to the fibers or to the woven fabric at any time; preferably, by pressing the dry powder into the fibers or fabric in a manner that results in effectively filling the available void spaces.

The composite fabric consisting of the fibers and nanoporous powder gives the fabric the properties of lightweight, water-proof, thermal insulating, and fire retarding.

For example, a linen fabric treated with 19% by weight of hydrophobic silica aerogel, completely shed water and its thermal resistance improved by 31% over the same thickness of un-treated fabric. The same treated fabric withstands a flame temperature of 525°F before scorching, 7 times longer than the untreated fabric.

RECORD OF INVENTION

Page 4

LLNL File No.

IX. Inventor Information

Inventor's Permanent Home Address (Please attach a separate sheet for additional inventors.)

Full Name	Citizenship	Street Address	City, State, Zip Code
Lawrence W. Hrubesh	US	19 Grey Eagle Court	Pleasanton 94566
John F. Poco	US	1841 Creek Road	Livermore, CA 94550
Paul R. Coronado	US	1354 Balboa Way	Livermore, CA 94550

X. Funding Source

Funding Source or Project Under Which the Invention Arose (Include subcontracts, CRADAs, international agreements, work for others, or special project information.):

Tech Base 3938-18			
Resource Manager	Phone #	Is funding presently being provided for development of your invention?	Yes No
Craig Schoendienst	42585		X
LLNL Acct #	B&R #	Please state the source of funds (if same as above, please so state):	
3938-18	NO LUNCA	Same as above	
Subcontract #	DOE Program Code	Do you reasonably expect future funding from the current source or other sources?	Yes No
	CRADAs		X
CRADA #	Work for Others #	If yes, what is that source?	

XI. Conception of the Invention

Conception Date	Conception Place		
	LLNL		
Earliest documentation of your invention (please provide date and identify the document): this doc 10/25/99		First Sketch or Drawing Date	First Written Description Date
Names of Witnesses or others with knowledge of facts relating to conception (preferably at least 2):			
Full Name	Organization	Telephone Number	

XII. Reduction To Practice of the Invention

Date first model completed	Date of operation and testing	Place of test
		LLNL
Results of testing:		
fabric shed water, gave higher heat resistance than untreated		
Witnesses or others with direct knowledge of test (preferably at least 2):		
Full Name	Organization	Telephone Number

LLNL File No.

XIII. Invention Use and Disclosure

Has the invention been put into use?	Yes	No	If yes, explain:
Has the invention been disclosed to non-LLNL personnel?	Yes	No	If yes, to whom and when? Provide name(s) and date(s):
If yes, was the disclosure done under a non-disclosure agreement?	Yes	No	

XIV. I/We believe myself/ourselves to be the first and original inventor(s) of the above-described invention.

Inventor Signature	Date	Witness Signature	Date
<i>Lawrence H. Rubesh</i>	[Redacted]	<i>Robert L. Schubert</i>	[Redacted]
<i>[Signature]</i>	[Redacted]	<i>L. Rubesh</i>	[Redacted]
<i>John D. [Signature]</i>	[Redacted]	<i>J. Rubesh</i>	[Redacted]

XV. Classification Review

Basis for unclassified release:			
<input checked="" type="checkbox"/>	Outside scope of AEA and EO		
	CG-DAR-1, Topic(s):		
	Other Guide(s):		
Topic(s):			
UCNI	Yes	No	If YES, Guide:
Authorized Derivative Classifier -- Name and Title		Signature	
LAWRENCE H. RUBESH - PHYSICIST		<i>[Signature]</i>	
Confirming Reviewer -- Name		Signature	
See next page		<i>[Signature]</i>	

XVI. For LLNL Patent Group Use Only

Possible Statutory Bars	
Publication	
Public Use/Sale	
Recommended Filing Date Due to Possible Statutory Bars	
Preliminary Review By:	Date

Send the completed and signed form to the Patent Group at L-703

XIII. Invention Use and Disclosure

Has the Invention been put into use?	Yes	No	If yes, explain:
Has the Invention been disclosed to non-LLNL personnel?	Yes	No	If yes, to whom and when? Provide name(s) and date(s):
If yes, was the disclosure done under a non-disclosure agreement?	Yes	No	

XIV. I/We believe myself/ourselves to be the first and original inventor(s) of the above-described invention.

Inventor Signature	Date	Witness Signature	Date
<i>Lawrence H. Rubesh</i>		<i>W. A. Boudner</i>	
<i>John T. Riser</i>		<i>L. H. Rubesh</i>	
		<i>J. T. Riser</i>	

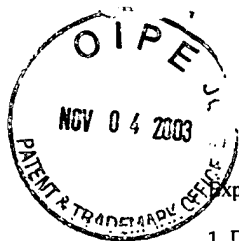
XV. Classification Review

Basis for unclassified release:			
<input checked="" type="checkbox"/>	Outside scope of AEA and EO		
<input type="checkbox"/>	CG-DAR-1, Topic(s):		
<input type="checkbox"/>	Other Guide(s):		
Topic(s):			
UCNI	Yes	No	If YES, Guide:
Authorized Derivative Classifier -- Name and Title		Signature	
LAWRENCE HRUBESH - PHYSICIST		<i>L. H. Rubesh</i>	
Confirming Reviewer -- Name		Signature	
W. A. Boudner		<i>W. A. Boudner</i>	

XVI. For LLNL Patent Group Use Only

Possible Statutory Bars	
Publication	
Public Use/Sale	
Recommended Filing Date Due to Possible Statutory Bars	
Preliminary Review By:	Date

Send the completed and signed form to the Patent Group at L-703



EXPRESS MAIL CERTIFICATE OF MAILING

Express Mail Certificate No. EV269145005US

I hereby certify that the *attached* correspondence comprising:

1. DECLARATION UNDER 37 CFR §1.131 Declaration by Eddie E. Scott of Prior Invention by Lawrence W. Hrubesh, John F. Poco, and Paul R. Coronado to Overcome Cited Reference (5 pages) w/attachment (28 pages), 2. Return Postcard is being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" addressed to:

Mail Stop Non-Fee Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

on November 4, 2003

Kathy E. Raymond
Kathy E. Raymond

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant :	Lawrence W. Hrubesh, et al.	Docket No. :	IL-10624
Serial No. :	10/002,513	Art Unit :	1771
Filed :	10/25/2001	Examiner :	Erma C. Cameron
For :	FIBERS AND FABRICS WITH INSULATING, WATER-PROOFING, AND FLAME-RESISTANT PROPERTIES		

DECLARATION UNDER 37 CFR §1.131

Declaration by Eddie E. Scott of Prior Invention by Lawrence W. Hrubesh,
John F. Poco, and Paul R. Coronado to Overcome Cited Reference

Commissioner of Patents and Trademarks
Alexandria, VA 22313-1450

Dear Sir:

I, Eddie E. Scott, hereby declare that:

- (1). I am a citizen of the United States and a resident of Danville, California;
- (2). My education includes: Bachelor of Science Degree, University of Wyoming; Master of Science Degree, University of Texas at Dallas; Juris Doctor

Degree, University of Wyoming; Patent Office Academy, Basic and Advanced, United States Patent and Trademark Office, Washington, D. C.;

(3). I am an active member of the State Bar of California, an inactive member of the State Bars of Texas and Wyoming, and I am registered to practice before the United States Patent and Trademark Office;

(4). I am employed by the University of California, at the Lawrence Livermore National Laboratory, Livermore, California, as Assistant Laboratory Counsel, having been employed by the University of California, at the Lawrence Livermore National Laboratory from May 1, 1999 to the present, and I am empowered to act on behalf of The Regents of the University of California, the owner of the subject application;

(5). I am the attorney representing the inventors Lawrence W. Hrubesh, John F. Poco, and Paul R. Coronado (The Inventors), in the subject patent application;

(6). In the Office Action mailed August 22, 2003, claims 10-18 in the subject application were rejected over the Soane et al Reference, International Patent Application No. WO 01/06054 by Avant-Garb, LLC. Claims 1-9 in the subject application are non-elected claims that were the subject of a restriction requirement. The Soane et al Reference, International Patent Application No. WO 01/06054, was published January 25, 2001, from an application filed July 19, 2000. The filing date of the application from which the Soane et al Reference matured is July 19, 2000;

(7). I have obtained copies of certain documents (The Documents) maintained in the ordinary course of business of the University of California, the Lawrence Livermore National Laboratory, and the United States Department of Energy (DOE) and I am one of the custodians of The Documents; copies of the documents are attached hereto as Attachments; The Documents show that The

Inventors made the invention described and claimed in the subject patent application (The Invention) in this country prior to July 19, 2000, having made written descriptions, having made tests, and having disclosed the invention to others; all of the foregoing having been done in this country prior to July 19, 2000; The Inventors continuously worked on testing, developing, and patenting The Invention during the period from the time when We made the first written description of The Invention and disclosed The Invention to others until October 25, 2001 when the subject application was filed (hereinafter "The Time Period"); The Inventors conceived and reduced The Invention to practice in this country prior to July 19, 2000;

(8). Attached as ATTACHMENT A is photostatic copy of a "RECORD OF INVENTION" which in the Conception of the Invention Section XI, contains an entry for the "Conception Date" and an entry for "First Written Description," in the Reduction to Practice of the Invention Section XII, contains an entry for the "Date of Operation and Testing," and in Section XIV contains blanks wherein signatures and dates of signatures appear; the dates on the photostatic copy of ATTACHMENT A have been blacked out, however, dates showing that The Inventors made The Invention prior to July 19, 2000 are dates prior to July 19, 2000; that We conceived The Invention in this country are dates prior to July 19, 2000; that We reduced The Invention to practice in this country are dates prior to July 19, 2000, and dates showing that The Invention was continuously worked on during The Time Period are dates during The Time Period;

(9). During The Time Period the Industrial Partnership and Commercialization Office (IPAC) of the Lawrence Livermore National Laboratory held monthly Invention Review Meetings and The Invention was reviewed at the Invention Review Meetings during The Time Period; IPAC continuously reviews inventions and prioritizes inventions for patent application

filing; The Invention was reviewed and prioritized by IPAC during The Time Period; a photostatic copy of a database entry showing that The Invention was reviewed by IPAC during The Time Period is attached as Attachment B, the dates on the photostatic copy have been blacked out; however, dates showing that The Inventors made The Invention prior to July 19, 2000 are dates prior to July 19, 2000, and dates showing that The Invention was continuously worked on during The Time Period are dates during The Time Period;

(10). During The Time Period the Office of Laboratory Counsel (OLC) of the Lawrence Livermore National Laboratory, held monthly Invention Review Meetings and The Invention was reviewed at the Meetings during The Time Period; the Office of Laboratory Counsel (OLC) also held monthly meetings with the Industrial Partnership and Commercialization Office (IPAC) during The Time Period and The Invention was reviewed at the Meetings; OLC prepares patent applications for filing according to a priority list; the parent application of the subject application was prepared by OLC covering The Invention according to the priority list; a photostatic copy of a database entry showing that The Invention was reviewed and a patent application filed by OLC during The Time Period is attached as Attachment C, the dates on the photostatic copy have been blacked out; however, dates showing that The Inventors made The Invention prior to July 19, 2000 are dates prior to July 19, 2000, and dates showing that The Invention was continuously worked on during The Time Period are dates during The Time Period;

(11). During The Time Period The Invention was continuously worked on; photostatic copies of documents maintained in the ordinary course of business of the University of California, the Lawrence Livermore National Laboratory, and the United States Department of Energy (DOE) showing that The Invention was continuously worked on during The Time Period are attached

as Attachments D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, and S; the dates on the photostatic copies have been blacked out; however, dates showing that The Inventors made The Invention prior to July 19, 2000 are dates prior to July 19, 2000, and dates showing that The Invention was continuously worked on during The Time Period are dates during The Time Period;

(12). I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

A handwritten signature in black ink, appearing to read "Eddie E. Scott", written over a horizontal line.

(Signature) 11/3/ 2003

Declarant: Eddie E. Scott

RECEIVED



LLNL PATENT GROUP

ATTACHMENT A
RECORD OF INVENTION

LLNL File No.
IL-10624

This invention was made in the course of or under prime Contract No. W-7405-ENG-48 between the U.S. Department of Energy and the University of California. This Record of Invention is prepared for the Office of the Assistant General Counsel for Patents, U.S. Department of Energy.

I. Title of the Invention

A method for insulating, water-proofing, and flame-proofing fibers and fabrics.

II. Inventor Information

LLNL Inventor(s) (F M L)	Title/Position	Directorate	Payroll Acct	Phone #	Mail Stop
Lawrence W. Hrubesh	Physicist	CMS	9808	3-1691	L-092
John F. Poco	Chemist	CMS	9808	3-9976	L-092
Paul R. Coronado	Chemist	CMS	9808	2-0155	L-092

III. Abstract

Any fibers and woven fabrics can be made water repellent, fire-retardant and thermally insulating by filling the void spaces in the fibers or fabrics with a hydrophobic, nanoporous powdered material. When the powder is sufficiently finely divided, it clings tenaciously to the fabric's fibers and to itself, resisting the tendency to be removed from the fabric. Thus, this treatment offers substantial long term improvement of the water repellent and thermal insulation properties over the untreated fabric, while not adding much additional weight to it.

IV. Uses of the Invention

List past uses, current uses and potential uses for your invention

LLNL or Government uses or possibilities for use:

Military clothing, blankets, tents, raingear, fire/flame protection

Commercial or other uses or possibilities for use:

clothing, blankets, tents, raingear, fire/flame protection

LLNL File No.

V. Documents Describing the Invention

Documents, publications, and presentations describing the invention that you have published or prepared for publication, or presented on the subject. Also include presentations and publications planned within one year from now. Please attach a copy of preprints, articles, or viewgraphs.

Title /Subject	Date	Publication #

VI. Documents Describing Prior Art (Please include copies of these documents.)

Related Documents (including patents, other publications) Please include patent numbers, authors, title, publication date, etc.

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VII. Background

Background of the invention, including technical problems addressed by it:

Fabrics are made water repellant by using fibers that are made of materials that will not be easily wet by water, or the fibers are coated with a water repellant material. The thermal insulating property of fabrics derives from the smallness of the fibers and the high ratio of void volume to solids within and between the fibers. To improve the water repellant property of a fabric, either better hydrophobic fibers or coatings are required, or the exposed surfaces of the un-treated fibers must be reduced. To improve the thermal insulating properties of a fabric, either smaller fibers are needed, or the void spaces within and between the fibers need to be made smaller. The best insulation would be achieved if the average fiber size and the average void size could be reduced below 0.1 micrometer.

VIII. Invention Description

Description of the invention (you may also attach a paper). Please include a sketch of the invention, if possible.

It is possible to fill the available void spaces in fibers and fabrics with a nanoporous material (powdered) whose particles and pores are so small that the thermal resistance of the powder is higher than that of the air that the powder is displacing. The powdered nanoporous material can be a hydrophobic material that is not easily wet with water. Thus the composite of fabric and powder has improved insulation and water-proofing properties.

The nanoporous powder can be any porous material that exhibits a microstructure consisting of sub-micrometer pores and particles; preferably, sol-gel derived, aerogel-like materials. The powders should have a composition such that the bulk material is not easily wet by pure water; preferably, the bulk material would make a contact angle greater than 90° with a water droplet on its surface.

The powder can be applied to the fibers or to the woven fabric at any time; preferably, by pressing the dry powder into the fibers or fabric in a manner that results in effectively filling the available void spaces.

The composite fabric consisting of the fibers and nanoporous powder gives the fabric the properties of lightweight, water-proof, thermal insulating, and fire retarding.

For example, a linen fabric treated with 19% by weight of hydrophobic silica aerogel, completely shed water and its thermal resistance improved by 31% over the same thickness of un-treated fabric. The same treated fabric withstands a flame temperature of 525°F before scorching, 7 times longer than the untreated fabric.

RECORD OF INVENTION

Page 4

LLNL File No.

IX. Inventor Information

Inventor's Permanent Home Address (Please attach a separate sheet for additional inventors.)

Full Name	Citizenship	Street Address	City, State, Zip Code
Lawrence W. Hrubesh	US	19 Grey Eagle Court	Pleasanton 94566
John F. Poco	US	1841 Creek Road	Livermore, CA 94550
Paul R. Coronado	US	1354 Balboa Way	Livermore, CA 94550

X. Funding Source

Funding Source or Project Under Which the Invention Arose (Include subcontracts, CRADAs, international agreements, work for others, or special project information.):

Tech Base 3938-18			
Resource Manager	Phone #	Is funding presently being provided for development of your invention?	Yes No
Craig Schoendienst	42585		X
LLNL Acct #	B&R #	Please state the source of funds (if same as above, please so state):	
3938-18	Not Listed	Same as above	
Subcontract #	DOE Program Code	Do you reasonably expect future funding from the current source or other sources?	Yes No
	Active		X
CRADA #	Work for Others #	If yes, what is that source?	

XI. Conception of the Invention

Conception Date	Conception Place		
	LLNL		
Earliest documentation of your invention (please provide date and identify the document): this doc 10/25/99	First Sketch or Drawing Date	First Written Description Date	
Names of Witnesses or others with knowledge of facts relating to conception (preferably at least 2):			
Full Name	Organization	Telephone Number	

XII. Reduction To Practice of the Invention

Date first model completed	Date of operation and testing	Place of test
		LLNL
Results of testing:		
fabric shed water, gave higher heat resistance than untreated		
Witnesses or others with direct knowledge of test (preferably at least 2):		
Full Name	Organization	Telephone Number



RECORD OF INVENTION

Pag 5

LLNL File No.

XIII. Invention Use and Disclosure

Has the invention been put into use?	Yes	No	If yes, explain:
Has the invention been disclosed to non-LLNL personnel?	Yes	No	If yes, to whom and when? Provide name(s) and date(s):
If yes, was the disclosure done under a non-disclosure agreement?	Yes	No	

XIV. I/We believe myself/ourselves to be the first and original inventor(s) of the above-described invention.

Inventor Signature	Date	Witness Signature	Date
<i>Lawrence H. Rubesh</i>	[Redacted]	<i>Walter L. Rubesh</i>	[Redacted]
<i>[Signature]</i>	[Redacted]	<i>L. Rubesh</i>	[Redacted]
<i>John R. [Signature]</i>	[Redacted]	<i>J. Rubesh</i>	[Redacted]

XV. Classification Review

Basis for unclassified release:			
<input checked="" type="checkbox"/>	Outside scope of AEA and EO		
	CG-DAR-1, Topic(s):		
	Other Guide(s):		
	Topic(s):		
UCNI	Yes	No	If YES, Guide:
Authorized Derivative Classifier -- Name and Title		Signature	
LAWRENCE RUBESH - PHYSICIST		<i>[Signature]</i>	
Confirming Reviewer -- Name		Signature	
See next page		<i>[Signature]</i>	

XVI. For LLNL Patent Group Use Only

Possible Statutory Bars

Publication	
Public Use/Sale	
Recommended Filing Date Due to Possible Statutory Bars	
Preliminary Review By:	Date

Send the completed and signed form to the Patent Group at L-703



RECORD OF INVENTION

Pag 5

LLNL File No.

XIII. Invention Use and Disclosure

Has the Invention been put into use?	Yes	No	If yes, explain:
Has the Invention been disclosed to non-LLNL personnel?	Yes	No	If yes, to whom and when? Provide name(s) and date(s):
If yes, was the disclosure done under a non-disclosure agreement?	Yes	No	

XIV. I/We believe myself/ourselves to be the first and original inventor(s) of the above-described invention.

Inventor Signature	Date	Witness Signature	Date
<i>Lawrence H. Rubesh</i>		<i>W. A. Brouner</i>	
<i>John E. Riser</i>		<i>L. Rubesh</i>	
		<i>J. Riser</i>	

XV. Classification Review

Basis for unclassified release:			
<input checked="" type="checkbox"/>	Outside scope of AEA and EO		
	CG-DAR-1, Topic(s):		
	Other Guide(s):		
Topic(s):			
UCNI	Yes	No	If YES, Guide:
Authorized Derivative Classifier - Name and Title		Signature	
LAWRENCE H. RUBESH - PHYSICIST		<i>L. Rubesh</i>	
Confirming Reviewer - Name		Signature	
W. A. Brouner		<i>W. A. Brouner</i>	
		11. 10. 94	

XVI. For LLNL Patent Group Use Only

Possible Statutory Bars	
Publication	
Public Use/Sale	
Recommended Filing Date Due to Possible Statutory Bars	
Preliminary Review By:	Date

Send the completed and signed form to the Patent Group at L-703

Patent Priority List - Scoresheet

High 20 Date:

IL #: 10624

Directorate: Chemistry

Inventors: Lawrence W. Hrubesh, John F. Poco, Paul R. Coronado

Title: A Method for Insulating, Water-Proofing, and Flame-Proofing Fibers and Fabrics

Non-LLNL Inventors:

(Check all that apply)

1

High 20 Priority:

☒

Recommended for the Top 20

☐

Important technical invention

☒

Commercial value

☐

Significant Programmatic interest

☒

Important LLNL portfolio (e.g. Aerogels)

☒

Proof of concept exists

☐

CRADA BIP

☐

CRADA Subject Invention

☐

License executed

☐

License in negotiation

☒

Commercial interactions/marketing

☐

Other time factors (bar date, provisional)

Additional comments (Specialist/Program Rep)

: Recent discussions with a prominent chemical company have suggested strong interest in this invention. This is an aerogel invention and is in abeyance until 11/01. L. Hrubesh says that this invention has not been published. This invention addresses the bonding of aerogel to other materials that may be expanded to composites in general, depending on the prior art in that area. (Meike)

Selected by IPAC for Top 20 (Weis/Dunipace)

Added to Top 20 List

Bar Dates:

Search Completed

Portfolio

Provisional filing date:

Publication Date:

Business Specialist:

Annemarie Meike

1

ATTACHMENT B

ATTACHMENT C

	3938-18
Additional Provisional Serial No.	Filing Date
Agents File Nos.	
Appeal Brief Due	
Appeal Brief Sent	
Applicant	
Application Authorized	
Application Mailed	
Application Requester	IP&C
Assignee	UC/IP&C
Attorney	Scott
Attorney Foreign	
Attorney Comments	
BandR No.	N/A
Case Combined with	
Confirmatory License	
Cont. App.	
Countries	
Date Att. Assign.	
Directorate Priority	1
Disclosure Submitted	
Eleven Year Amount	
Eleven Yr Fee Due	
Eleven Yr Fee Paid	
Filing Date	
Final OA Sent	
Final Office Action	
First OA Sent	
First Office Action	
For. Response Due	
Foreign Agents	
Foreign Status	IPAC do not pursue PCT filing(ES, KR
Foreign Title	
Fourth OA Sent	
Fourth Office Action	
IDS Due	
IDS Sent	
IL Index Key	10624
IL Number	10624
IL suffix	

IL Type						
Inactivated by DOE						
Inactivated by IPAC						
International Filing Date						
International Serial No.						
Inventors	Lawrence W. Hrubesh, John F. Poco, Paul R. Coronado					
IPAC PCT Req.						
Last Modified Date						
Last Person To Modify	April Masluk					
Last Modified Time	11:52:08 AM					
Licensee						
Miscellaneous Information						
Natl Appl. Nos.						
Notice of Allowability						
Notice of Allowability Sent						
Notice of Allowance Date						
Notice of Allowance Sent						
Notice of Appeal Due						
Notice of Appeal Sent						
Patent App. Title	FIBERS AND FABRICS WITH					
Patent Issued Date						
Patent Number						
Patent Status	Second Office Action--resp. due 11/22/2003 (am).					
PCT Due						
PCT I National Entry						
PCT II Demand Due						
PCT II Demand Filed						
PCT II National Entry						
Priority Date						
Provisional Filing Date						
Provisional PCT Due						
Provisional Serial No.						
Publication Cite						
Publication Date						
Related Cases						
Response Due						
Restriction Req. Sent						
Restriction Requirement						
Rights Granted Date						
Rights Requested Date						

RL Number						
ROI Title	A Method for Insulating, Water-Proofing, and					
S Number	94210					
Second OA Sent						
Second Office Action						
Serial Number						
Seven Year Amount						
Seven Yr Fee Due						
Seven Yr Fee Paid						
Third OA Sent						
Third Office Action						
Three Year Amount						
Three Yr Fee Due						
Three Yr Fee Paid						
Type Requested	Class Waiver W(C) 92-002					
UC number						
Patent Expiration Date						
Foreign Patent No.						
Foreign Issue Date						
Prov. PCT Due Date						
Non-Lab Employee						
Modification Index	2003239.11520					
No Interest by IPAC						
High 20 Nominated Candidates	(2)					
High 20's List						
Omit	X					
Priority						
Bar Date 1						
Foreign Bar Date						
Bar Date 2						
Bar Date 3						
Bar Date Comments						
Portfolio						
Abstract						
Int'l Search Report						
Written Opinion						
Response Sent						
Small Entity						
Int'l Pre Exam Rpt						

FUA NOA						
CPA Filed						
First CPA Office Action						
Second CPA Office Action						
Final CPA Office Action						
First CPA OA Sent						
Second CPA OA Sent						
Final CPA OA Sent						
EUVL						
EUVL Assignee						
Search Requested						
Search Completed						
Search Sent To						
For. Miscellaneous Info						
Prov PCT Request Sent						
PCT Request Sent						
Search Report Resp Sent						
ISA						
IPEA						
Request to Outside Counsel						
Supp Int'l Search Rpt Rec'd						
Supp Search Rpt Resp						
Int'l Pre Exam Resp						
Written Opinion Resp						
National Countries						
National Fees						
PCT Pub Date						
PCT Pub Sent Inv.						
AIPA Applies	AIPA Applies					
Non LLNL Inventors						
Multiple Due Dates						
Multiple Foreign Due Dates						
RCE filed						
First RCE Office Action						
First RCE Office Sent						
Second RCE Office Action						
Second RCE Office Sent						
Final RCE Office Action						
Final RCE Office Sent						



*University of California
Lawrence Livermore National Laboratory
Intellectual Property Law Group*

[REDACTED]

*Mail Station: L-703
Extension: 2-0505*

Interoffice Memorandum

TO: Bill Bollinger

FROM: Terry Contreras

A handwritten signature in cursive script, appearing to read 'Terry Contreras'.

SUBJECT: New Disclosure and Record of Invention
LLNL Case No.: IL-10624

Please review the attached disclosure for classification purposes. When you have finished your review please sign the disclosure and return to me at L-703.



University of California
LAWRENCE LIVERMORE NATIONAL LABORATORY
Intellectual Property Law Group

[REDACTED]

Mr. William C. Daubenspeck
Office of Patent Counsel
Intellectual Property Law Division
Livermore, California 94550

SUBJECT: Invention Case No.: IL-10624
"A Method for Insulating, Water-Proofing, and Flame-Proofing
Fibers and Fabrics "
By: Lawrence W. Hrubesh, John F. Poco, Paul R. Coronado

Dear Mr. Daubenspeck:

Enclosed are the original and one copy of the combined Disclosure and Record of
Invention in the subject case.

Very truly yours,

A handwritten signature in cursive script, appearing to read 'K Sudweeks'.

Kjersti Sudweeks
Intellectual Property Law Group

Enclosure

cc: Penny Hennagir w/enc
IP&C Sara Sanders L-795 w/enc
Lawrence W. Hrubesh L-092 w/enc
John F. Poco L-092 w/enc
Paul R. Coronado L-092 w/enc



Department of Energy
Oakland Operations Office
Office of Chief Counsel
Intellectual Property Law Division

ATTACHMENT F

Livermore Office
P.O. Box 808, L-376
Livermore, CA 94550
(925) 422-4367
FAX (925) 422-8228

RECEIVED

Janet G. Tulk, Laboratory Counsel, L-703

Subject: **DOE Patent Docket No.: S-94,210**

LLNL Docket No.: IL-10624

Title: A Method for Insulating, Water-Proofing, and Flame-Proofing Fibers and Fabrics

Inventor(s): Lawrence w. Hrubesh et al.

Under DOE Contract No.: W-7405-ENG-48

LLNL - I. P. L. G.

The Laboratory's transmittal to this office on [REDACTED] of the above-identified invention disclosure is acknowledged with appreciation. The invention disclosure has been assigned the above-indicated DOE Patent Docket (S) number. Your reference to this number in future communications with this office will be helpful.

Based on the information provided to DOE in the invention disclosure, the commercial rights to this invention are readily obtainable by the Laboratory during the first two years following disclosure of the invention to DOE under the provisions of the above contract. As set forth in Article XII, Cl.1, paragraph (c)(3) of the contract, if the Laboratory wants the commercial rights to the invention, the Laboratory must elect to retain title within the two-year period. However, if public disclosure, use or sale of the invention has initiated the one year statutory period to apply for U.S. patent protection, the period for election of title is shortened by DOE to end 60 days before the end of the U.S. statutory period. Therefore, it is important for this office to be notified immediately about any public disclosure, use or sale.

In an effort to give the Laboratory as much latitude as possible to decide on commercialization of the invention, this office of DOE will hold the invention in abeyant status for a period of two years from the above date of invention disclosure. Generally during this abeyant status period, DOE takes no action on protecting the invention by the filing of a U.S. patent application. Instead DOE relies on the Laboratory to carefully evaluate the invention's potential and decide whether or not to obtain the commercial rights in the invention. If the Laboratory elects to retain title to the invention, the Laboratory must file a patent application within one year of the date of election plus any extensions granted by DOE but, in any event, before the expiration of any statutory bar period. However, during the two-year period for election, should the Laboratory decide not to retain title and inform DOE in writing, DOE will at that time evaluate whether the filing of a U.S. patent application is warranted to meet the Government's needs. If the Laboratory decides not to retain title to the invention, you are encouraged to notify DOE at your earliest convenience.

If there are any questions concerning this letter or DOE actions, please feel free to contact this office.

Randall W. C. Chang
Randall W. C. Chang
Patent Agent

cc: Karena McKinley, LLNL, L-795
Lawrence w. Hrubesh, LLNL, L-092
John F. Poco, LLNL, L-092
Paul R. Coronado, LLNL, L-092

RWCC:JLR:wkc

JS



ATTACHMENT G

Lawrence Livermore National Laboratory *Industrial Partnerships & Commercialization*



Janet G. Tulk
Laboratory Counsel
LLNL, L-703

Subject: DOE Case No. S-94210
LLNL Docket No. IL-10624
Invention Title: A Method for Insulating, Water-Proofing, and Flame-
Proofing Fibers and Fabrics
Inventors: Lawrence W. Hrubesh, John F. Poco, Paul R. Coronado

Dear Ms. Tulk:

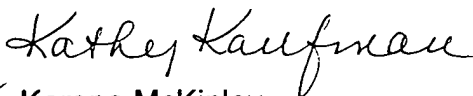
This letter is to request that you prepare and file a U.S. patent application for the above-referenced matter on behalf of The Regents of the University of California. A waiver concerning the subject invention has been prepared and is being submitted to DOE OAK. A copy is enclosed for your file. Foreign filing is not requested at this time but will be revisited at a future date. We ask that your office track the foreign file date(s) and keep us accordingly advised.

Please proceed with this application for filing with the U.S. Patent Office in a timely manner.

Please send a copy of the patent application as filed, serial number, and filing data as they become available to Nina Rhodes and keep her advised regarding the progress of the filing.

At this time I ask that your office track the patent filing fees and prosecution costs for the subject application and keep our office informed of the expenditures required.

Sincerely,


for Karena McKinley
Director, Industrial Partnerships &
Commercialization

Attachment
cc: Lawrence W. Hrubesh, L-092
Annemarie Meike, L-795



ATTACHMENT H

Lawrence Livermore National Laboratory Industrial Partnerships & Commercialization



Mr. William C. Daubenspeck
Office of Patent Counsel
U.S. Department of Energy
Oakland Operations Office
P.O. Box 808, L-376
Livermore, CA 94550

Subject: NOTICE OF ELECTION TO RETAIN TITLE TO DEFENSE
PROGRAM INVENTION UNDER CLASS WAIVER W(C)-92-002

Dear Mr. Daubenspeck:

Pursuant to the terms of Contract W-7405-ENG-48 between the Department of Energy (DOE) and the Regents of the University of California (University), and subject to Class Waiver W(C)-92-002, we submit an Election Memorandum for the following invention:

DOE Case No. S-94210
LLNL Docket No. IL-10624
A Method for Insulating, Water-Proofing, and Flame-Proofing Fibers and Fabrics
Inventors: Lawrence W. Hrubesh, John F. Poco, Paul R. Coronado

The University has reviewed the subject invention disclosure with respect to: (1) export control; (2) United States preference/competitiveness; and (3) adverse impact upon the Naval Nuclear Propulsion Program and other nuclear and/or atomic energy defense activities of the Department of Energy and agrees to comply with all statutes and regulations governing export control, U.S. preference/competitiveness, and the Naval Nuclear Propulsion Program, et al., in dealing with the subject inventions. (A copy of the Invention Disclosure including a Classification Review, and an original signed Export Control Review for Licensing and Patents form, are attached to the enclosed Election Memorandum.)

Further, the University agrees to comply with Clause 66.1.F governing technology transfer activities under Contract Number W-7405-ENG-48.

Your prompt review of this Election Memorandum will be appreciated.

Sincerely,

Kathy Kaufman
for Karena McKinley
Director, Industrial Partnerships
& Commercialization

cc: Lawrence W. Hrubesh, L-092
Annemarie Meike, L-795
Janet G. Tulk, L-703

WAIVER LEGAL APPROVAL

ATTACHMENT I

Date: 

IL File No: 10624

Document Type:

- DP Class Waiver
- Election Letter

- CRADA - Class Waiver
- Ext. of Time (Class Waiver)

Description: _____

Document needs the following:

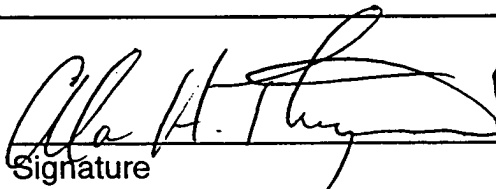
 X Legal/Patent Review _____

 Additional Approval(s) _____

 Other _____

Reviewer comments: _____

Approved as to Legal Form


Signature


Date

Return to: Name: Sara Sanders

Extension: 3-0381

L-Code: 795

O Please Call for Pick-up

*Interdepartmental Letterhead*

Mail Station L-302

Ext: 2-4406

RECEIVED

EC-2001-107

LLNL-I.P.L.G.

To: Sara Sanders, L-795

From: William R. Fritchie

Subject: Export Control Review for IL-10624 "A Method for Insulating, Water-Proofing and Flame-Proofing Fibers and Fabrics"

Review of Regulations. An export control review of the subject technology was conducted using the following applicable regulations:

Nuclear Regulatory Commission (NRC). This technology is export controlled as Sensitive Technology under the NRC Regulations (10 CFR Part 110), [REDACTED] Yes___ No_X_ [web site: http://www.access.gpo.gov/nara/cfr/waisidx_99/10cfr110_99.html]

Department of Energy (DOE). This technology is export controlled as Sensitive Technology under the DOE Regulations (10 CFR Part 810), [REDACTED] Yes___ No_X_ [web site: http://www.access.gpo.gov/nara/cfr/waisidx_99/10cfr810_99.html]

Department of State (DOS). This technology is export controlled under the DOS International Traffic in Arms Regulations (ITAR) (22 CFR Parts 120-130), [REDACTED] Yes___ No_X_ [web site: http://www.access.gpo.gov/nara/cfr/waisidx_99/22cfrv1_99.html]

Department of Commerce (DOC). This technology is export controlled under the DOC Export Administration Regulations (EAR) (15 CFR Parts 730-774) [REDACTED] Yes_X_ No___ [web site: http://www.access.gpo.gov/bxa/ear/ear_data.html]

Narrative. This technology is export controlled by the DOC EAR (15 CFR Part 774, Category 2, specifically ECCN EAR99), and requires no license for export, subject to the following caveat:

This technology may not be exported to individuals on the current Denied Persons List (15 CFR Part 764, Supplement 2) or to the presently embargoed countries (15 CFR Part 746).

Separate license requirements may apply for the export of commodities associated with this technology. For additional licensing guidance, contact Lou Hill (Traffic/Shipping) at 424-4201.

William R. Fritchie
Classification/Export Control Adviser

cc: Nancy Stone, L-703



ATTACHMENT K

Department of Energy
Oakland Operations Office
Office of Chief Counsel
Intellectual Property Law Division
[REDACTED]

Livermore Office
P.O. Box 808, L-376
Livermore, CA 94550
(925) 422-4367
FAX (925) 422-8228

RECEIVED
[REDACTED]

Karena McKinley
Director, Industrial Partnership and Commercialization
Lawrence Livermore National Laboratory, L-001
c/o Sara Sanders, LLNL-TTIP, L-795

LLNL - I. P. L. G.

SUBJECT: DOE Patent Case: S-94,210
Title: A Method for Insulating, Water-Proofing, and Flame-Proofing Fibers and
Fabrics
Docket No.: IL-10624
DOE Contract No: W-7405-ENG-48
Waiver No.: W(C)-92-002-803

Your transmittal to this office of the subject class waiver is acknowledged with appreciation.

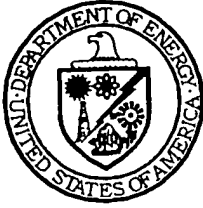
The class waiver has been assigned the W(C) number identified above. Your reference to this number in future communications with this office will be helpful.

Very truly yours,

Janet L. Rego
Legal Instruments Examiner

Copy to: Janet G. Tulk, LLNL, L-703

JLR:wkc



Department of Energy
Oakland Operations Office
Office of Chief Counsel
Intellectual Property Law Division
[REDACTED]

Livermore Office
P.O. Box 808, L-376
Livermore, CA 94550
(925) 422-4367
FAX (925) 422-8228

Karena D. McKinley
Director, Industrial Partnership and Commercialization
Lawrence Livermore National Laboratory, L-795
c/o Sara Sanders, LLNL-TTIP, L-795

Re: Approval of Election by LLNL under DOE Waiver W(C) 92-002-802
DOE Inven. Case No.: S-94,210
LLNL Inven. Docket No.: IL-10624
Inventor(s): Lawrence W. Hrubesh et al.
Invention Title: A Method for Insulating, Water-Proofing, and Flame-Proofing Fibers and Fabrics


Dear Ms. McKinley:

Enclosed with this letter is a copy of the LLNL Election Memorandum for the above-identified invention. It has the signatures of the appropriate DOE officials approving LLNL's election. The effective date of DOE's approval is [REDACTED].

Please have the LLNL Patent Group forward to this office a copy of each patent application filed on the referenced invention and a copy of any issued patents thereon.

Furthermore, have LLNL's Industrial Partnerships and Commercialization Program periodically provide this office with information demonstrating LLNL's commercialization efforts for the subject invention as required by Contract No. W-7405-ENG-48.

Respectfully,


William C. Daubenspeck
Patent Attorney

Enclosure

Copy to: Michael A. Wahlig, DOE-OAK, L-293 (w/o encl)
Janet G. Tulk, LLNL, L-703
Lawrence W. Hrubesh, LLNL, L-092 (w/o encl)
John F. Poco, LLNL, L-092 (w/o encl)
Paul R. Coronado, LLNL, L-092 (w/o encl)

WCD:wkc

65

ATTACHMENT M

CONTAINS PROPRIETARY INFORMATION

ELECTION MEMORANDUM

DATE:

SUBJECT: Notice of Election to Retain Title to the Following Defense Program
Subject Invention Under Class Waiver W(C)-92-002

FROM: LLNL Industrial Partnerships & Commercialization, L-795
Nina Rhodes/Sara Sanders, Administrators, (925) 422-6416

TO: Assistant Chief Counsel for Patents, DOE/OAK

DOE NO: S-94,210

DATE REPORTED TO DOE:

FIRST NAMED INVENTOR: Lawrence W. Hrubesh

INVENTION TITLE: A Method for Insulating, Water-Proofing, and
Flame-Proofing Fibers and Fabrics

B&R NUMBER: N/A

DOE PROGRAM OFFICIAL: N/A

A copy of the Subject Invention Disclosure is attached hereto.

The Regents of the University of California (UC) hereby elects to retain title to the Subject Invention, under the terms and conditions of the Statement of Consideration of Class Waiver W(C)-92-002, in the United States and such foreign countries as may be determined. We will advise DOE of any foreign filing decisions and actions taken by the University.

UC hereby represents that it has conducted a reasonable internal inquiry, and as a result, it has determined that the Subject Invention falls within the Class Waiver. UC has further determined that the Subject Invention does not fall within international agreements or treaties of the U.S. Government.

UC further represents that it will attempt to commercialize the Subject Invention through its licensees within five (5) years from the time this election is effective. UC

agrees to file, prosecute, and maintain those patent applications and issued patents on the Subject Invention which are necessary to effectively fulfill its obligations under the subject Class Waiver and its Technology Transfer Agreement entered into with the Department of Energy (DOE) on January 23, 1991, under Contract No. W-7405-ENG-48.

UC has provided for the following safeguards for the protection of national security while commercializing the Subject Invention:

UC further represents that it has determined that the technology has been reviewed for export control. See the attached Export Control Review for Patents and Licensing form attached hereto and incorporated herein as if fully set forth. UC further represents that it will inform all licensees of any requirements or limitations on export of the technology.

In making its determination that the Subject Invention falls within the subject Class Waiver, UC has concluded, through its Program and Technology Transfer Offices, that national security will not be compromised by the development, commercialization or licensing activities involving the invention; that no sensitive technical information (classified or unclassified) under any of DOE's programs will be released to unauthorized persons; that the dissemination of the technology will not contribute to the proliferation of nuclear weapons; and that there will be no adverse effect on the operation of the Naval Nuclear Propulsion Program or the Nuclear Weapons Program or other defense activities of DOE by UC taking title.

UC understands that an election of Defense Programs funded inventions is not effective until approval by the DOE Assistant Chief Counsel for Intellectual Property and concurrence by the Defense Programs Field Review Official is obtained.

CONCURRENCE:

Michael A. Walsh
Defense Programs

Date:

APPROVAL:

W. C. Dauberspeck
William C. Dauberspeck
for Asst. Chief Counsel for Patents, OAK

Effective Date:

DOE S# 94210; IL# 10624



University of California

Lawrence Livermore National Laboratory

ATTACHMENT N

IN STRICT CONFIDENCE
ATTORNEY WORK PRODUCT
CLASSIFICATION REVIEW TRANSMITTAL

To: Bill Fritchie
Classification Office
L-302

From: Kathy Raymond
Patent Group
L-703

Subject: Patent Application: Classification Review Requested Yes ☒ No ☐
Export Control Review Requested Yes ☐ No ☒
Most Recent Export Control Review on file dated [REDACTED]

For: S-94,210
IL-10624
"FIBERS AND FABRICS WITH INSULATING, WATER-
PROOFING, AND FLAME-RESISTANT PROPERTIES"

Date
Transmitted: [REDACTED]

COMMENTS:

Bill,

Please review and return.

Thank you.

ATTACHMENT O

Classification Review of Patent Application

Docket Number:	IL-10624
Unclassified Title: (U)	FIBERS AND FABRICS WITH INSULATING, WATER-PROOFING, AND FLAME-RESISTANT PROPERTIES
Inventors:	Lawrence W. Hrubesh, John F. Poco, Paul R. Coronado

Authorized Derivative Classifier Determination	
<input checked="" type="checkbox"/> Unclassified	
<input type="checkbox"/> Unclassified, but Controlled	
<input type="checkbox"/> UCNI Other: _____	
<input type="checkbox"/> UCNI Reviewing Official Determination is required	
<input type="checkbox"/> Classified - Level and Category	
Specify Authority (Guide/Topics): _____	
If NSI, Review/Declassify on (Date or Event): _____	
Additional markings Required:	Weapon Data - Sigma(s): _____
	Other: _____
ADC Name: <u>LAWRENCE HRUBESH</u>	ADC Title: <u>PHYSICIST</u>
ADC Signature: <u>[Signature]</u>	Date: <u>[Redacted]</u>

UCNI Reviewing Official Determination (If requested)	
<input type="checkbox"/> The application does <i>not</i> contain UCNI.	
<input type="checkbox"/> The application <i>may</i> contain UCNI.	
<input type="checkbox"/> The application <i>does</i> contain UCNI.	
Reviewing Official Signature: _____	Date: _____

Classification Office Confirming Review	
<input checked="" type="checkbox"/> The ADC's determination is correct.	
<input type="checkbox"/> The Inventor's determination is correct.	
The correct classification is: _____	
Reviewing Official Signature: <u>[Signature]</u>	Date: <u>[Redacted]</u>

William R. Fritchle
Classification/Export Control Adviser



University of California
Lawrence Livermore National Laboratory



*University of California
Lawrence Livermore National Laboratory
Intellectual Property Law Group*

Mail Station: L-703

Extension: 3-9034

Interoffice Memorandum

TO: Janet Rego L-376
Nina Rhodes L-795

FROM: Kathy Raymond

SUBJECT: IL-10624
S-94,210

Enclosed for your records is a copy of the Patent Application, Recordation Cover Sheet with Assignment, and return postcard.

If you have any questions, please do not hesitate to call.

A handwritten signature in cursive script that reads 'Kathy Raymond'.

Kathy Raymond
Intellectual Property Law Group

Enclosures: as noted

ATTACHMENT Q



University of California
Lawrence Livermore National Laboratory
Intellectual Property Law Group

[REDACTED]

Mail Station: L-703

Extension: 3-9034

Interoffice Memorandum

TO: Nancy Stone

FROM: Kathy Raymond

SUBJECT: USE OF PATENT GROUP DEPOSIT ACCOUNT (12-0695)

As of this date, I have charged the following amount(s) to the Patent Group deposit account:

<u>Amount</u>	<u>IL Number</u>	<u>Attorney</u>	<u>Type of Action</u>
\$40.00	IL-10624	EES	Fee for Filing New Application
<u>\$538.00</u>			New Application Transmittal (Small Entity)
\$578.00 Total			

ATTACHMENT R



University of California
Lawrence Livermore National Laboratory
Intellectual Property Law Group



IN STRICT CONFIDENCE ATTORNEY WORK PRODUCT

Mail Station: L-703

Extension: 3-9034

Interoffice Memorandum

TO: Lawrence W. Hrubesh, L-592

FROM: Kathy Raymond

SUBJECT: IL-10624

**"FIBERS AND FABRICS WITH INSULATING, WATER-PROOFING, AND
FLAME-RESISTANT PROPERTIES"**

Enclosed is a copy of your patent application which you recently executed. The information in the patent application may be of a confidential nature and you are advised not to release any of the information contained therein without prior approval from this office, unless it is already available to the public. The Patent and Trademark Office does not allow public access to pending applications.

Your cooperation in this matter is greatly appreciated.

Sincerely,

A handwritten signature in cursive script that reads "Kathy Raymond".

Kathy Raymond
Intellectual Property Law Group

Enclosure:

Patent Application

cc: John F. Poco, L-092
Paul Coronado, L-092

ATTACHMENT S

Patent Application Filed in
the Name of the Contractor
Class Waiver (8/00)

CONFIRMATORY LICENSE

Title: Fibers and Fabrics With Insulating, Water-
Proofing, and Flame-Resistant Properties
Inventor(s): Lawrence W. Hrubesh, et al
Contract Number: W-7405-ENG-48
Contractor: Regents of the University of California
Lawrence Livermore National Laboratory

DOE Docket No.: S-94,210
Docket No.: IL-10624
U.S. Patent Application S.N.: 10/002513
Filing Date: [REDACTED]
Waiver No.: W(C) 92-002

Foreign patent applications filed or intended to be filed at contractor's expense in (countries):

The Contractor certifies that a true copy of the provisions which govern patent rights in "subject inventions" under the above-identified contract is herewith submitted or has been submitted to the U.S. Department of Energy by certification dated [REDACTED].

WHEREAS, the above-identified invention is a subject invention under the above-identified contract;

WHEREAS, the above-identified Class Waiver of Government rights in certain identified inventions and the above-identified contract provides the Contractor with the right to elect to retain title in certain subject inventions and the Contractor has elected to retain title in the above-identified subject invention, EXCEPT FOR a paid-up license under the above-identified contract and the above-identified waiver.

ACCORDINGLY, the Contractor hereby confirms that under the provisions of the above-identified contract governing patent rights, it has granted to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world. This license applies to the above-identified invention, the above-identified patent application(s), and any and all divisions or continuations thereof and any resulting patent or reissue patent which may be granted thereon.

The Government reserves for itself, and is hereby granted by the Contractor, the irrevocable power to inspect and make copies of the file wrapper(s) of the above-identified U.S. patent application and of any related or continuation patent application(s), whether domestic or foreign, for the above-identified invention.

It is understood and agreed that this instrument does not preclude the Government from asserting rights under the provisions of the above-identified contract or any other agreement between the Government and the Contractor, or any other rights of the Government with respect to the above-identified invention.

Signed on behalf of: THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

(Contractor)

Witness:

[Signature]
(Signature)

By:

[Signature]
(Contractor Official's Signature)

(Date)

Wendy R. Pebler, Paralegal
(Name and Title)

Alan H. Thompson, Deputy Laboratory
(Print/Type Contractor Official's Name and Title)

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